



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

003990

D4148-041
Job Sheet 179719



Part No: D4148-041

Job Qty: 8 ea

Part Name: Fwd Crosstube Lug Assembly



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 6/21/18

Job Tracking No:

Due Date: 7/6/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG REV E SHEETS 1,2 IPP Rev:A 10.06.24 new issue DD verf:EC IPP Rev:B 10.07.22 as per revB DD
verf:JLM IPP Rev:C 10.10.29 as per revC DD verf:EC IPP REV:D 11.03.02 AS PER DWG REV.D DD
VERF:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	8 Ea	7/6/18	7/6/18	0.00	0.00	Start Up Small Fab-3	9-89	JUL 02 2018
100	Small Fab	8 pcs	7/6/18	7/6/18	0.00	2.40	Small Fab-6	9-89	JUL 11 2018
110	QC	8 pcs	7/6/18	7/6/18	0.00	0.00	QC5	9-89	JUL 11 2018
120	Packaging	8 pcs	7/6/18	7/6/18	0.00	0.00	Packaging3-2	9-89	JUL 11 2018
130	QC21-SA	8 Ea	7/6/18	7/6/18	0.00	0.00	QC21	9-89	JUL 11 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN3C12A	Bolt	16 Ea (2 ea)	90-Start up Operation	
AN4C13A	Bolt	24 Ea (3 ea)	90-Start up Operation	
D2690-6	Lanyard	8 Ea (1 ea)	90-Start up Operation	
D3910-1	Crosstube Lug	8 Ea (1 ea)	90-Start up Operation	
D4091-1	Mounting Lug	8 Ea (1 ea)	90-Start up Operation	
D4148-1	Crosstube Lug Plate, Fwd	16 Ea (2 ea)	90-Start up Operation	
D4148-3	Stud Receiver, Lower	8 Ea (1 ea)	90-Start up Operation	
D4148-5	Eyebolt Stud	8 Ea (1 ea)	90-Start up Operation	
MS17984-C413	Quick Release Pin	8 pcs (1 ea)	90-Start up Operation	
MS20615-4M18	Rivet	64 Ea (8 ea)	90-Start up Operation	
MS21043-3	Nut	16 Ea (2 ea)	90-Start up Operation	
MS21043-4	Nut	24 Ea (3 ea)	90-Start up Operation	
NAS1149C0332R	Washer	32 Ea (4 ea)	90-Start up Operation	
NAS1149C0432R	Washer	48 Ea (6 ea)	90-Start up Operation	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Cross tube ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging Supplier ☐ Engineering Quality ☐ Other ☐																																																																																			
Date : _____		Step #: _____		MRB (QSI042) Approval _____ _____ _____																																																																																			
Description Work Order Container No: S088966 Part: D4148-041 Job No: 179719 Serial No/ Batch: S088966 Date: 07/04/18						Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																																																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left;">Root Cause</th> <th colspan="4"></th> </tr> </thead> <tbody> <tr> <td>Environment</td><td>☐</td> <td>No Re-verifc</td><td>☐</td> <td colspan="4" rowspan="10" style="vertical-align: top;"> Damage/Defect Inspection Incomplete/Unqualified Contamination Countersink Cut Too Short Instructions Incomplete/Unclear Drill Holes </td> </tr> <tr> <td>Design</td><td>☐</td> <td>Operator</td><td>☐</td> </tr> <tr> <td>Doc/Data</td><td>☐</td> <td>Offset/Setup</td><td>☐</td> </tr> <tr> <td>Equip/Tooling</td><td>☐</td> <td>Supplier</td><td>☐</td> </tr> <tr> <td>Handling/Pre</td><td>☐</td> <td>Training</td><td>☐</td> </tr> <tr> <td>Material</td><td>☐</td> <td>Use for Testing</td><td>☐</td> </tr> <tr> <td>Internal Transport</td><td>☐</td> <td>Poor Information</td><td>☐</td> </tr> <tr> <td>Tribal Knowledge</td><td>☐</td> <td>Rushing</td><td>☐</td> </tr> <tr> <td>LOA</td><td>☐</td> <td>Product Improvement</td><td>☐</td> </tr> <tr> <td>Substation</td><td>☐</td> <td>Process Improvement</td><td>☐</td> </tr> <tr> <td>Past Expiry Date</td><td>☐</td> <td>Manufacturing Process</td><td>☐</td> <td colspan="4" rowspan="2" style="vertical-align: top;"> Power Loss/Surge Folio/Program Grain Weld Wrong Stock Pulled Out of Sequence Off-set Mislabeled Fit/Function Misaligned/off center </td> </tr> <tr> <td>Misidentified</td><td>☐</td> <td>Past Due</td><td>☐</td> </tr> <tr> <td colspan="4"></td> <td colspan="4" style="vertical-align: top;"> Positioned Wrong Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Drawing Finish Misread Turning Sequence </td> </tr> <tr> <td colspan="4"></td> <td colspan="4" style="vertical-align: top;"> OTHER : _____ </td> </tr> </tbody> </table>								Root Cause								Environment	☐	No Re-verifc	☐	Damage/Defect Inspection Incomplete/Unqualified Contamination Countersink Cut Too Short Instructions Incomplete/Unclear Drill Holes				Design	☐	Operator	☐	Doc/Data	☐	Offset/Setup	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Testing	☐	Internal Transport	☐	Poor Information	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Power Loss/Surge Folio/Program Grain Weld Wrong Stock Pulled Out of Sequence Off-set Mislabeled Fit/Function Misaligned/off center				Misidentified	☐	Past Due	☐					Positioned Wrong Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Drawing Finish Misread Turning Sequence								OTHER : _____			
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Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	AN3C12A	16	110	0
	AN4C13A	24	125	0
	D2690-6	8	29	0
	D3910-1	8	25	0
	D4091-1	8	52	0
	D4148-1	16	58	0
	D4148-3	8	0	0
	D4148-5	8	7	0
	MS17984-C413	8	23	0
	MS20615-4M18	64	66	0
	MS21043-3	16	721	0
	MS21043-4	24	597	0
	NAS1149C0332R	32	5,349	0
	NAS1149C0432R	48	1,935	0

Part Specifications

Specifications could not be found.

Plex 6/21/18 7:27 AM dart.lacelle.linda

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER :			



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Container View (Active) - Master Unit Containers

Master Unit No	Container No	Part No	Part Name	From Container	Current Location	Quantity
003990	S082955	AN3C12A	Bolt	S068653	ST349	16
003990	FM137699-1	AN4C13A	Bolt		GA003	2
003990	S062293	AN4C13A	Bolt		ST344	19
003990	S082957	AN4C13A	Bolt	S078166	ST344	3
003990	S077936	D2690-6	Lanyard	S077935	ST009	3
003990	S082926	D2690-6	Lanyard	s081355	ST009	5
003990	S057733	D3910-1	Crosstube Lug	S057731	ST525	5
003990	S082927	D3910-1	Crosstube Lug	s071259	ST525	3
003990	S082928	D4091-1	Mounting Lug	s067530	ST525	8
003990	S049871	D4148-1	Crosstube Lug Plate, Fwd	S049870	ST080	1
003990	S082930	D4148-1	Crosstube Lug Plate, Fwd	s066756	ST080	15
003990	S059806	D4148-5	Eyebolt Stud	S059805	ST080	7
003990	S071350	MS17984-C413	Quick Release Pin		ST315	8
003990	S041582	MS20615-4M18	Rivet X14		ST306	50
003990	S082935	MS21043-3	Nut	S034415	ST302	16
003990	S082936	MS21043-4	Nut	S062296	ST302	24
003990	S081417	NAS1149C0332R	Washer	s049837	ST266	2
003990	S082937	NAS1149C0332R	Washer	S049837	ST266	30
003990	S082938	NAS1149C0432R	Washer	S050052	ST266	48

Note: Ad hoc query view of Part.dbo.Container where Container.Active = 1.

Plex 6/21/18 11:04 AM dart.quirion.sonia

D4148-3 x 8

D4148-5 x 1 S088428X1

S088



Dart Aerospace Ltd.
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Hawkesbury, ON
K6A 1K7
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Container View (Active) - Master Unit Containers

Master Unit No	Container No	Part No	Part Name	From Container	Current Location	Quantity
003990	S082955	AN3C12A	Bolt	S068653	ST349	16
003990	FM137699-1	AN4C13A	Bolt		GA003	2
003990	S062293	AN4C13A	Bolt		ST344	19
003990	S082957	AN4C13A	Bolt	S078166	ST344	3
003990	S077936	D2690-6	Lanyard	S077935	ST009	3
003990	S082926	D2690-6	Lanyard	s081355	ST009	5
003990	S057733	D3910-1	Crosstube Lug	S057731	ST525	5
003990	S082927	D3910-1	Crosstube Lug	s071259	ST525	3
003990	S082928	D4091-1	Mounting Lug	s067530	ST525	8
003990	S049871	D4148-1	Crosstube Lug Plate, Fwd	S049870	ST080	1
003990	S082930	D4148-1	Crosstube Lug Plate, Fwd	s066756	ST080	15
003990	S059806	D4148-5	Eyebolt Stud	S059805	ST080	7
003990	S071350	MS17984-C413	Quick Release Pin		ST315	8
003990	S041582	MS20615-4M18	Rivet		ST306	50
003990	S083611	MS20615-4M18	Rivet	S083540	ST306	14
003990	S082935	MS21043-3	Nut	S034415	ST302	16
003990	S082936	MS21043-4	Nut	S062296	ST302	24
003990	S081417	NAS1149C0332R	Washer	s049837	ST266	2
003990	S082937	NAS1149C0332R	Washer	S049837	ST266	30
003990	S082938	NAS1149C0432R	Washer	S050052	ST266	48

Note: Ad hoc query view of Part.dbo.Container where Container.Active = 1.

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